

## NAVAL APPROPRIATION BILL.

APRIL 6, 1908 (Calendar day, April 8, 1908). Committed to the Committee of the Whole House on the state of the Union and ordered to be printed.

Mr. Foss, from the Committee on Naval Affairs, submitted the following

### REPORT.

[To accompany H. R. 20471.]

The Committee on Naval Affairs, to whom was referred so much of the President's annual message as relates to the naval establishment, together with the annual estimates of the Navy Department, submit herewith H. R. —, making appropriations for the naval service for the fiscal year ending June 30, 1909, with the following statement:

The amount carried by this bill is \$103,967,518.43.

The estimates of the Department amounted to \$125,041,349.80.

The committee, after careful consideration of these estimates, made deductions to the amount of \$22,518,831.37, and under "Increase of the Navy" recommend an appropriation of \$1,000,000 toward the construction of submarine boats, and \$445,000, within the discretion of the Secretary of the Navy, for the construction of subsurface torpedo boats.

The following table gives a comparative statement of the appropriations for 1908 furnished by the Navy Department, the estimates for 1909, and the amounts recommended in this bill:

Naval Establishment.	Appropriated, 1908.	Estimates, 1909.	Recommended by this bill.
Pay of the Navy.....	\$21,000,000.00	\$26,086,201.00	\$27,274,201.00
Pay, miscellaneous.....	675,000.00	723,000.00	723,000.00
Contingent, Navy.....	65,000.00	65,000.00	65,000.00
Naval station, Island of Guam: Maintenance and care of lepers and other special patients.....	16,000.00	15,000.00	15,000.00
Bureau of Navigation.....	1,996,663.00	2,586,267.86	2,438,276.00
Bureau of Ordnance.....	11,715,406.75	21,414,606.75	10,744,772.75
Bureau of Equipment.....	7,528,028.00	10,236,978.00	9,424,849.00
Bureau of Yards and Docks.....	1,129,652.90	1,731,438.70	1,429,652.90
Public works, Bureau of Yards and Docks.....	3,124,940.00	12,054,822.00	3,170,400.00
Public works, Secretary of the Navy:			
Naval Academy.....	380,000.00	247,000.00	47,000.00
Public works, Bureau of Navigation:			
Naval training station, California.....	39,000.00	29,500.00	29,500.00
Naval training station, Rhode Island.....	58,912.00	140,890.00	139,890.00
Naval training station, Great Lakes.....	700,000.00	1,095,600.00	1,095,600.00
Public works, Bureau of Ordnance.....	370,280.00	571,460.00	152,360.00
Public works, Bureau of Equipment.....	10,000.00	10,000.00	10,000.00
Public works, Bureau of Medicine and Surgery.....	285,000.00	450,000.00	360,000.00
Bureau of Medicine and Surgery.....	405,900.00	425,000.00	385,000.00
Bureau of Supplies and Accounts.....	7,365,845.21	7,337,320.30	7,321,882.09

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Naval Establishment.	Appropriated, 1908.	Estimates, 1909.	Recommended by this bill.
Bureau of Construction and Repair.....	\$8,102,824.25	\$8,502,824.25	\$8,202,824.25
Bureau of Steam Engineering.....	5,729,420.00	7,120,240.00	6,309,420.00
Naval Academy.....	440,728.36	483,582.86	475,728.36
Marine Corps:			
Public works.....			210,000.00
Paymaster.....	2,843,998.46	2,972,685.08	2,948,201.08
Quartermaster.....	2,417,089.00	3,508,971.00	2,316,999.00
Increase of the Navy:			
Construction and machinery.....	12,713,915.00	9,832,962.00	9,832,962.00
Armor and armament.....	10,000,000.00	7,000,000.00	7,000,000.00
Equipment.....	750,000.00	400,000.00	400,000.00
Subsurface or submarine.....	500,000.00		1,445,000.00
Total.....	100,303,602.93	125,041,349.80	103,967,518.43

The first paragraph of the bill relates to—

#### PAY OF THE NAVY.

Pay of the Navy.	Appropriated, 1908.	Estimates, 1909.	Recommended.
Pay of the Navy.....	\$21,000,000.00	\$26,086,201.00	\$27,274,201.00
Pay, miscellaneous.....	675,000.00	723,000.00	723,000.00
Contingent, Navy.....	65,000.00	65,000.00	65,000.00

The estimates as submitted in the Book of Estimates for the naval establishment called for an increase of 3,000 men, and later, at the hearings before the committee, it was demonstrated that an increase of 6,000 men in all would be necessary to man ships that are in commission and those about to be commissioned. The total estimate for pay for the 42,000 men and officers amounts to \$27,274,201. After careful consideration, the committee judged it to be unwise to reduce this estimate, in view of the fact that at the time of the hearings the enlisted force was recruited within 600 men of the full allowance, and for the past three or four months over 2,000 men have been recruited monthly. It is therefore the belief of the committee that the additional 6,000 men herein provided for will be shortly recruited, and the amount herein recommended will be necessary for pay.

The additional 6,000 men are recommended as it will be necessary to put the following ships in commission within the next few months: *California, Mississippi, Idaho, New Hampshire, South Dakota, North Carolina, Montana, Chester, Birmingham, and Salem*, and in addition 1,500 men are required to commission torpedo boats not now in commission.

The appropriation for "Pay, miscellaneous," has an apparent increase of \$48,000. This increase is due to a plan of consolidating all the charges pertaining to the Navy Department and its bureaus for ice, telephone rentals and tolls, telegrams, cablegrams, and postage, foreign and domestic, post-office box rentals, and express charges, so that they may be paid through one office instead of being paid through offices in the several bureaus, thereby preventing the multiplication of vouchers and duplication of work, which will result in economy. The various bureaus and appropriations from which these charges have been heretofore paid have been reduced in amounts equal to the amount necessary to pay these various charges. Therefore, while there is an apparent increase of \$48,000 in this appropriation, there has been a

corresponding reduction of \$48,000 in the appropriations from which these charges have been heretofore paid. Otherwise the appropriation "Pay, miscellaneous," remains the same as last year, while that for "Contingent, Navy," likewise remains the same.

## BUREAU OF NAVIGATION.

The following table is a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts recommended in this bill:

Bureau of Navigation.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Transportation .....	\$400,000.00	\$550,870.00	\$475,000.00
Recruiting .....	121,340.00	130,000.00	130,000.00
Contingent .....	15,000.00	20,000.00	12,462.00
Gunnery exercises .....	120,000.00	140,000.00	130,000.00
Outfits on first enlistment .....	600,000.00	900,000.00	900,000.00
Maintenance of naval auxiliaries .....	500,000.00	571,540.00	525,000.00
Naval training station, California .....	50,000.00	61,000.00	60,652.00
Naval training station, Rhode Island .....	71,000.00	80,000.00	79,511.00
Naval training station, Great Lakes:			
Maintenance .....	20,000.00	30,000.00	29,860.00
Salaries clerical force (1 clerk, increase of \$200 submitted) .....	6,940.00	7,140.00	6,940.00
Naval War College .....	18,700.00	20,700.00	18,700.00
Naval Home, Philadelphia, Pa. ....	73,683.00	75,017.86	70,151.00
Total .....	1,996,663.00	2,586,267.86	2,438,276.00

The appropriation for transportation has been increased \$75,000, because the Navy has enlisted more men this year than in any previous year, and a great many of the recruits came from the interior and had to be transported to the various stations along the coast, and transportation has increased in cost greatly. The Navy Department has been unable to make satisfactory contracts with the railroads, as has previously been the case, and a great many of the recruits have been transported to the Pacific coast, thereby necessarily increasing the amount of this appropriation.

The appropriation for "Outfits on first enlistment" is increased to \$900,000 by reason of the increased cost of materials, which enter into the manufacture of the outfit and the increase in the number of enlistments, as heretofore stated. A deficiency of about \$300,000 is estimated under this appropriation for the present year.

The provision for the "Maintenance of naval auxiliaries" has been increased \$25,000; this increase is due to the fact that the wages of all the men on auxiliaries have been increased. There are 18 vessels included in the Naval Auxiliary Service, each one having a crew of from 25 to 40 men, and from 7 to 9 officers each.

The appropriation recommended for the naval training station in California has been increased from \$50,000 to \$60,652, an increase of \$10,652. The committee deemed this increase proper in view of the fact that a great many more men will be at this station on account of the fleet's being on the Pacific, and as recruits are enlisted from the interior they will be transported to this training station in California. The appropriation for the Rhode Island Naval Training Station has been increased by \$8,500 in order that many of the enlisted men who now do work not incident to the Naval Service about the station can be taken from this work and engaged in the work for which they



enlisted, and their places to be taken by others not in the Naval Service. The appropriation for the naval training station, Great Lakes, has likewise been increased \$9,860. for protection of the water front. The appropriation for the Naval War College is the same as last year, and there is a decrease of about \$3,500 in the Naval Home, Philadelphia.

## BUREAU OF ORDNANCE.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts recommended in this bill:

Bureau of Ordnance.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Ordnance and ordnance stores:			
Procuring, producing, preserving, and handling ordnance material	\$4,000,000.00	\$4,500,000.00	\$4,500,000.00
Ammunition and other supplies for new ships	750,000.00	1,284,000.00	2,750,000.00
Smokeless powder, purchase and manufacture of	500,000.00	650,000.00	650,000.00
Machine tools for navy-yard, Boston, Mass.	39,000.00		
Machine tools for navy-yard, New York, and magazine, Dover, N. J.		10,000.00	10,000.00
Machine tools for navy-yard, Mare Island, Cal.		50,000.00	50,000.00
Auxiliary hoist, building No. 111, navy-yard, Mare Island, Cal.		3,500.00	3,500.00
For Naval Gun Factory, Washington, D. C.:			
New and improved machinery for existing shops.	150,000.00	150,000.00	150,000.00
Machinery, cupolas, furnaces, etc., for proposed new foundry		122,000.00	
Remodeling 110-ton crane in north gun shop.		30,000.00	
Machinery for locomotive house		12,000.00	
Mines for issue (for mine ship)		100,000.00	
Experimental work in the development of armor-piercing projectiles, fuzes, powders and high explosives, erosion tests, mounts, sights, etc.		200,000.00	
Advance base outfits		780,000.00	
Modernizing battery of Iowa	36,000.00		
Modernizing batteries of Monterey and Monadnock.	20,000.00		
New turret sights for 4 monitors of Arkansas class.	16,000.00		
New battery for the Brooklyn.	177,200.00		
Modifying mounts and providing new sights	100,000.00	135,000.00	60,000.00
Replacing 3-pounder and 6-pounder guns and mounts and sights on board battle ships and armored cruisers by 3-inch 50 caliber guns, mounts, and sights.		830,000.00	415,000.00
Purchase or manufacture of new ammunition-hoisting arrangements for all turret ships to and including the South Carolina and Michigan.		2,112,000.00	
Replacing 8-inch guns on Maryland and class (20 guns)		502,000.00	250,000.00
Replacing 12-inch Mark III with Mark V guns on all battle ships (18 guns)		1,108,000.00	
Lining eight 12-inch Mark III guns.		93,000.00	350,000.00
Replacing firing locks on 5-inch and 6-inch guns		45,000.00	45,000.00
Replacing small arms and automatic guns.		1,195,500.00	
Fire-control instruments for battle ships, monitors, and cruisers.	300,000.00	300,000.00	300,000.00
Reserve stock of mines and mine appliances	100,000.00	300,000.00	
Torpedoes and converting torpedo boats, etc.	300,000.00	1,150,000.00	650,000.00
Reserve ammunition	4,000,000.00	4,000,000.00	
Reserve guns for ships of the Navy.	750,000.00	453,000.00	
Repairing, modernizing, and fitting with sights 4-inch and 5-inch guns and mounts not needed for vessels in commission		500,000.00	
Reserve torpedoes and appliances.	250,000.00	500,000.00	300,000.00
Torpedo station, Newport, R. I.	70,000.00	75,000.00	70,000.00
Naval militia	60,000.00	100,000.00	100,000.00
Repairs, ordnance.	30,000.00	50,000.00	30,000.00
Contingent, ordnance.	20,000.00	20,000.00	14,066.00
Civil establishment	47,206.75	54,606.75	47,206.75
Total	11,715,406.75	21,414,606.75	10,744,772.75

The appropriation for "Ordnance and ordnance stores" has been increased by \$500,000.00. This might be termed the working appropriation of the Bureau. A large part of this appropriation is for target

practice, and owing to the fact that there will be in full or partial commission during the fiscal year of 1908-9 24 battle ships, 12 first-class cruisers, 66 second and third rate vessels, 60 torpedo vessels, and 15 auxiliaries, making a total of 177 vessels, an increase for target practice must be provided for. This appropriation includes all work at navy-yards, magazines, and naval proving grounds; all material and labor necessary for the care and preservation of ordnance stores on shore and afloat; furniture in ordnance buildings at navy-yards and in magazines and stations; labor, watchman, fuel, tools, and a great variety of miscellaneous items not otherwise provided for.

The appropriation for smokeless powder is increased \$150,000. The committee deemed it wise to allow this increase for the purpose of reworking deteriorated or useless powder at Indian Head powder factory. This process renders useless powder of great value at one-fourth the cost to manufacture the same quantity of new powder.

The appropriations "Ammunition and other supplies for new ships" and "Reserve ammunition" have been consolidated under the appropriation "Ammunition and other supplies for ships." Upon investigation the committee found that there had accumulated under the appropriation "Increase of the Navy; armor and armament" a large quantity of ammunition which was only available for use on new ships as they were placed in commission, and likewise a large quantity under the appropriation "Reserve ammunition" which could not be properly used on the ships in commission, but held as a reserve supply. As this resulted in a deterioration of this ammunition the committee deemed it wise that the ammunition accumulated under these two appropriations should be made available for issue and used before deterioration and replaced by new ammunition from time to time.

The appropriation for new and improved machinery at the Naval Gun Factory, Washington, D. C., is the same as last year.

The committee recommend the completion of the work of modifying the 4-inch 40-caliber mounts and the 5-inch 40-caliber mounts, but reduces the appropriation to \$60,000. The committee also recommend an appropriation of \$415,000 for replacing the 3-pounder and 6-pounder guns by 3-inch 50-caliber or larger guns, because of the increased effective range of the latest type of torpedo. These new guns give the ships protection from long-range torpedo discharge. The committee also recommend the replacing of 8-inch Mark V guns with 8-inch Mark VI guns on the *Maryland* and her class, and the relining and converting of 12-inch Mark III to Mark IV guns; also the replacing Mark IX two-firing locks with Mark X firing locks on 5 and 6 inch guns, in order that the batteries of the ships may be kept in the highest state of efficiency.

The appropriation for fire-control instruments for the ships is the same as last year.

The committee recommend an appropriation of \$650,000 for torpedoes and converting torpedo boats, in order that the torpedo boats may be brought up to the highest degree of efficiency for the discharge of the modern torpedo, and that the most modern torpedoes be either purchased or manufactured for the same. In addition thereto the committee recommends an appropriation of \$300,000 under the title "Torpedoes and appliances," the latter appropriation being intended mainly for the cost of manufacture of torpedoes and appliances at the

Government's torpedo station at Newport, R. I. The appropriation for the maintenance of the torpedo station at Newport is the same as last year.

The committee recommend an increase of the appropriation "Arming and equipping Naval Militia" to \$100,000, in order that this branch of the Naval Reserve of the United States might be more efficiently conducted.

#### BUREAU OF EQUIPMENT.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Bureau of Equipment.	Appropriated, 1908.	Estimates, 1909.	Recommended.
Equipment of vessels.....	\$3,250,000.00	\$4,250,000.00	\$3,750,000.00
Coal and transportation .....	4,150,000.00	5,000,000.00	5,000,000.00
Contingent equipment .....	15,000.00	15,000.00	11,821.00
Ocean and lake surveys.....	75,000.00	75,000.00	75,000.00
Depots for coal .....	.....	600,000.00	450,000.00
Chain-making machine .....	.....	100,000.00	.....
Equipment machinery plants .....	.....	150,000.00	100,000.00
Civil establishment, Bureau of Equipment.....	38,028.00	46,978.00	38,028.00
Total .....	7,528,028.00	10,236,978.00	9,424,849.00

The appropriation "Equipment of vessels" is increased \$500,000 over the appropriation of last year. This increase is due to the increased number of ships put in commission and the necessity of fitting them with fire-control apparatus, as well as wireless telegraphy. The greater part of the increase is due to items for electrical work. The Department is asking an increase of \$690,000 alone for the electrical branch. There are 75 vessels of the Navy fitted, or about to be fitted, with wireless, and it is estimated that the maintenance of the stations on board ships amounts to \$50,000 annually. In this appropriation is included an item of \$35,000 to cover necessary work to be done on vessels loaned or to be loaned to the States for the use of Naval Militia. In view of the increased number of ships in commission and about to be commissioned, the committee recommend the increase above stated.

The appropriation "Coal and transportation" is increased \$850,000. The committee recommend this increase because of the greater number of ships in commission and the policy of the Department to have fleet maneuvers on such a scale as to test the battle efficiency of the fleets. The principal causes of the increase are as follows:

(a) Increase in the number of purposes for which the appropriation is applied.

(b) Increase of the number of ships in commission.

(c) Increase in size of ships and consequent coal consumption.

(d) Increase in the first cost of coal at tide water.

(e) Increase in freight rates due to transporting coal to greater distances than heretofore.

An appropriation of \$450,000 is recommended by the committee for "Depots for coal," which will enable the Secretary of the Navy to execute the provisions of section 1552 of the Revised Statutes, which amount is to be used for completing the coal depots at San Diego and California City Point, as there is a very pressing demand for coaling stations on that coast.



## BUREAU OF YARDS AND DOCKS.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Bureau of Yards and Docks.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Maintenance, yards and docks.....	\$950,000.00	\$1,500,000.00	\$1,250,000.00
Contingent, Bureau of Yards and Docks .....	30,000.00	30,000.00	30,000.00
Civil establishment .....	149,652.90	201,438.70	149,652.90
Total .....	1,129,652.90	1,731,458.70	1,429,652.90

The committee recommend an increase of \$300,000 under the appropriation "Maintenance of Yards and Docks." This increase is due to the consolidation of the heat, light, and power plants in all the navy-yards, whereby it is believed a great reduction in cost will ultimately be realized. Another item in the increase is due to the fact that all the telephones installed in the various navy-yards are now placed under this Bureau instead of being under several, as heretofore. It is believed this will result in a great saving. Another item in the increase is due to a considerable increase in the cost of labor and material. There will likewise be an increase in cost on account of the change in the system of accounting, which will enable the Paymaster-General to give an exact account, and is an excellent system, whereby the value of stock on hand can be ascertained at any time.

## PUBLIC WORKS, BUREAU OF YARDS AND DOCKS.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Navy-yards and stations.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Portsmouth, N. H. ....	\$244,900.00	\$871,350.00	\$156,000.00
Boston, Mass. ....	128,500.00	435,800.00	197,800.00
New York, N. Y. ....	263,800.00	628,000.00	286,000.00
Philadelphia, Pa. ....	125,500.00	993,225.00	190,000.00
Washington, D. C. ....	85,000.00	985,047.00	48,000.00
Charleston, S. C. ....	287,000.00	402,500.00	135,000.00
Norfolk, Va. ....	365,500.00	1,950,500.00	505,000.00
Mare Island, Cal. ....	248,500.00	786,800.00	211,000.00
Puget Sound, Wash. ....	258,500.00	1,491,500.00	420,000.00
Pensacola, Fla. ....	242,500.00	157,800.00	36,800.00
New Orleans, La. ....	156,300.00	75,000.00	31,000.00
Tutuila, Samoan Islands .....	6,000.00	15,000.00	15,000.00
Olongapo, P. I. ....	90,000.00	555,500.00	100,000.00
Island of Guam .....	22,500.00	32,000.00	32,000.00
Cavite, P. I. ....	13,000.00	59,700.00	59,700.00
Culebra .....	2,000.00	11,100.00	11,100.00
Newport, R. I. ....	7,840.00	.....	.....
Key West, Fla. ....	41,500.00	23,000.00	.....
Guantanamo, Cuba .....	.....	425,000.00	.....
Plans and specifications for public works.....	30,000.00	40,000.00	30,000.00
Repairs and preservation at navy-yard .....	500,000.00	750,000.00	600,000.00
Hawaii .....	3,100.00	6,000.00	6,000.00
Floating derrick .....	.....	360,000.00	100,000.00
Total .....	3,124,940.00	12,054,822.00	3,170,400.00

It will be seen from the above table that the estimates amounted to \$12,054,822; but after careful consideration of these estimates and hearings thereon the committee recommend this year a total of

\$3,170,400, which is a small increase over the appropriation of last year. The committee recommend the insertion of the following provision regarding the expenses of consolidation of power plants, etc.:

The Secretary of the Navy shall report to Congress at the commencement of the next regular session the amount of money expended on consolidation of power plants since the authorization for such consolidation was given, in 1904, such statement to be in detail for each navy-yard and to indicate amount expended for building and machinery separately; also to include a statement of the value of building and power plants at each navy-yard at the date of the above-noted authorization; also the total amounts appropriated for power houses and power-plant extensions which had not been utilized on April 27, 1904, the date of the authorization of the consolidations.

It will be noted that the committee recommend the expenditure of money in the navy-yards and stations principally toward the completion of the consolidation of the heat, light, and power plants, work which has already been begun and is well advanced.

#### PUBLIC WORKS UNDER THE SECRETARY OF THE NAVY.

The committee recommend an appropriation of \$62,000 under this appropriation, in which is included \$15,000 for maintenance and care of lepers at the naval station, Island of Guam. The remaining \$47,000 is for the enlargement of the water plant at the Naval Academy and other smaller items. The enlargement of this water plant at the Naval Academy will result in a total saving of from \$18,000 to \$20,000 a year in water bills.

#### PUBLIC WORKS, BUREAU OF NAVIGATION, ORDNANCE, EQUIPMENT, MEDICINE AND SURGERY.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts recommended in this bill for public works under the Bureaus of Navigation, Ordnance, Equipment, and Medicine and Surgery:

Public works, Bureau of Navigation.	Appropriated, 1908.	Estimates, 1909.	Recommended.
Naval training station, California.....	\$39,000.00	\$29,500.00	\$29,500.00
Naval training station, Rhode Island.....	58,912.00	140,890.00	139,890.00
Naval training station, Great Lakes.....	700,000.00	1,095,600.00	1,095,600.00
Total.....	797,912.00	1,265,990.00	1,264,990.00
Public works, Bureau of Ordnance:			
Naval magazine, Dover, N. J.....	22,000.00		
Naval magazine, St. Juliens Creek.....	14,000.00	12,450.00	
Naval proving grounds, Indian Head, Md.....	34,130.00	314,760.00	14,760.00
Naval magazine, Fort Mifflin, Pa.....	8,200.00	22,100.00	14,600.00
Naval magazine, Mare Island, Cal.....	50,000.00	33,000.00	11,500.00
Torpedo station, Rhode Island.....	12,500.00	124,300.00	54,150.00
Magazine, Iona Island, N. Y.....	23,950.00	17,500.00	10,000.00
Magazine, Puget Sound, Wash.....	75,000.00	34,350.00	34,350.00
Pensacola, Fla.....		5,000.00	5,000.00
Olongapo, P. I.....		8,000.00	8,000.00
Total.....	369,780.00	571,460.00	152,360.00
Public works, Bureau of Equipment:			
Naval Observatory, grounds and roads.....	10,000.00	10,000.00	10,000.00
Public works, Bureau of Medicine and Surgery:			
Naval hospital, Pensacola, Fla.....	25,000.00	50,000.00	
Naval hospital, Puget Sound, Wash.....	75,000.00	75,000.00	75,000.00
Naval hospital, Washington, D. C.....	60,000.00		
Naval medical supply depot, Canacao.....	25,000.00		
Naval hospital, Norfolk, Va. (act of June 29, 1906).....	100,000.00	100,000.00	100,000.00
Naval hospital, Annapolis, Md.....		125,000.00	85,000.00
Naval hospital, Great Lakes.....		100,000.00	100,000.00
Total.....	285,000.00	450,000.00	360,000.00



## PUBLIC WORKS, BUREAU OF NAVIGATION.

The committee recommend improvements to the amount of \$29,500 for the naval training station in California, \$139,890 for the naval training station in Rhode Island, and \$1,095,600 for the naval training station, Great Lakes. This appropriation for the Great Lakes naval training station completes the buildings in accordance with the provisions of the act of Congress, approved June 29, 1906, and will complete the electrical mains and conduits and pay the cost of inspection, architect's fee, and other necessary improvements to the station.

## PUBLIC WORKS, BUREAU OF ORDNANCE.

The committee recommend minor improvements to the extent of \$14,760 at the naval proving ground, Indian Head, Md.; \$14,600, naval magazine, Fort Mifflin, Pa.; \$11,500, naval magazine, Mare Island, Cal.; \$54,150 at torpedo station, Newport, R. I.; \$10,000, naval magazine, New York Harbor; \$34,550, naval magazine, Puget Sound, Wash.; \$5,000, navy-yard, Pensacola, Fla., and \$8,000 for naval magazine, Olongapo, P. I., making a total of \$152,360, a reduction of over \$217,000 in the appropriation for last year.

## PUBLIC WORKS, BUREAU OF EQUIPMENT.

An appropriation of \$10,000 is recommended, the same as last year, for the Naval Observatory.

## PUBLIC WORKS, BUREAU OF MEDICINE AND SURGERY.

The committee recommend an appropriation of \$75,000 to complete the naval hospital at Puget Sound, as authorized by the naval act of March 2, 1907; also \$85,000 for the erection of new wards at the naval hospital, Annapolis, Md. The need of the contagious wards contemplated to be built by this appropriation has been demonstrated by an epidemic of diphtheria among the midshipmen at Annapolis in the past four months, when the patients had to be quartered in tents. One hundred thousand dollars is recommended to complete the appropriation for the naval hospital at Norfolk, Va., as authorized by the act of Congress approved June 29, 1906. A like appropriation is recommended for a naval hospital at Great Lakes, as at present there is no provision made for the sick at that station.

## PUBLIC WORKS, MARINE CORPS.

The committee recommend an appropriation of \$210,000 for public works for the Marine Corps, a reduction of \$137,000 in last year's appropriation. Of this amount, \$70,000 is for the purchase of ground adjoining quartermaster's depot and building an addition to same, which is urgently requested. The remaining appropriation is divided among the navy-yards, Philadelphia, Pa., Norfolk, Va., Charleston, S. C., Boston, Mass., New York, N. Y., Olongapo, P. I., and Sitka, Alaska.

## BUREAU OF MEDICINE AND SURGERY.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Bureau of Medicine and Surgery.	Appropriated, 1908.	Estimates, 1909.	Recommended.
Medical department .....	\$255,000.00	\$270,000.00	\$270,000.00
Naval hospital fund.....	40,000.00	40,000.00	.....
Contingent, medicine and surgery .....	55,000.00	60,000.00	60,000.00
Transportation of remains .....	10,000.00	10,000.00	10,000.00
Repairs, medicine and surgery .....	45,000.00	45,000.00	45,000.00
Equipment, naval hospital, Guantanamo.....	900.00	.....	.....
Total .....	405,900.00	425,000.00	385,000.00

The appropriations, as will be seen from the above table, are practically the same as last year, there being an increase of \$20,000 due to the enlistment of additional men under the provision of the naval act of March 2, 1907.

## BUREAU OF SUPPLIES AND ACCOUNTS.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Bureau of Supplies and Accounts.	Appropriated, 1908.	Estimates, 1909.	Recommended.
Provisions, Navy.....	\$6,526,866.87	\$6,547,903.75	\$6,547,903.75
Contingent, supplies and accounts.....	175,000.00	170,000.00	170,000.00
Freight, supplies and accounts.....	500,000.00	500,000.00	500,000.00
Civil establishment, supplies and accounts .....	103,978.34	119,416.55	103,978.34
Total .....	7,305,845.21	7,337,320.30	7,321,882.09

The appropriation "Provisions, Navy" is practically the same as last year. The other appropriations of this Bureau remain the same as last year.

## BUREAU OF CONSTRUCTION AND REPAIR.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Bureau of Construction and Repair.	Appropriated, 1908.	Estimates, 1909.	Recommended.
Construction and repair of vessels .....	\$7,900,000.00	\$8,750,000.00	\$8,000,000.00
Improvement of construction plants:			
Navy-yard, Portsmouth, N. H.....	15,000.00	15,000.00	15,000.00
Navy-yard, Boston, Mass.....	20,000.00	20,000.00	20,000.00
Navy-yard New York, N. Y.....	20,000.00	20,000.00	20,000.00
Navy-yard, League Island, Pa.....	15,000.00	15,000.00	15,000.00
Navy-yard, Norfolk, Va .....	12,000.00	12,000.00	12,000.00
Navy-yard, Charleston, S. C.....	20,000.00	20,000.00	20,000.00
Navy-yard, Pensacola, Fla.....	15,000.00	15,000.00	15,000.00
Navy-yard, Mare Island, Cal.....	15,000.00	15,000.00	15,000.00
Navy-yard, Puget Sound, Wash.....	20,000.00	20,000.00	20,000.00
Naval station, New Orleans, La.....	10,000.00	10,000.00	10,000.00
2 seagoing tugs .....	.....	300,000.00	.....
Civil establishment.....	40,824.25	40,824.25	40,824.25
Total .....	8,102,824.25	9,252,824.25	8,202,824.25

The appropriations for this Bureau are substantially the same as last year, an increase of \$100,000 being recommended under the appropriation "Construction and repair of vessels," to be used for vessels loaned to the Naval Militia of the various States.

## BUREAU OF STEAM ENGINEERING.

The following table gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Bureau of steam engineering.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Steam machinery:			
For completion, repairing, and preservation of machinery, boilers, etc.....	\$3,500,000.00	\$4,065,000.00	\$3,750,000.00
For purchase, handling, and preservation of material, stores, etc.....	2,000,000.00	2,500,000.00	2,250,000.00
For incidental expenses for naval vessels and yards.....	6,000.00	6,000.00	6,000.00
Improvement of steam engineering plant:			
Portsmouth, N. H., Navy-Yard.....	30,000.00	75,000.00	30,000.00
Boston, Mass., Navy-Yard.....		25,000.00	25,000.00
New York, N. Y., Navy-Yard.....	40,000.00	40,000.00	40,000.00
Philadelphia, Pa., Navy-Yard.....	25,000.00	25,000.00	25,000.00
Norfolk, Va., Navy-Yard.....	25,000.00	40,000.00	25,000.00
Pensacola, Fla., Navy-Yard.....	10,000.00	30,000.00	10,000.00
Mare Island, Cal., Navy-Yard.....		75,000.00	25,000.00
Puget Sound, Wash., Navy-Yard.....		50,000.00	25,000.00
New Orleans, La., naval station.....		10,000.00	10,000.00
Guantanamo, Cuba, naval station.....		10,000.00	
Olavite, P. I., naval station.....	25,000.00	15,000.00	15,000.00
Olongapo, P. I., naval station.....	20,000.00	25,000.00	25,000.00
Engineering experimental station, United States Naval Academy, Annapolis, Md.:—			
Salaries.....	5,520.00	12,240.00	5,520.00
For civilian assistant to director.....			
For 1 chemist.....			
For 1 skilled mechanic.....			
For 1 electrical mechanic.....			
Contingent.....		1,000.00	
Experimental work at engineering laboratory....	25,000.00	30,000.00	25,000.00
Buildings.....		50,000.00	
1 house for quarters for engineering director (officer).....			
1 house for quarters for assistant to director (officer).....			
1 house for quarters for assistant to director (civilian).....			
Civil establishment:			
At all navy-yards and stations.....	17,900.00	36,000.00	17,900.00
Total.....	5,729,420.00	7,120,240.00	6,309,420.00

The appropriations for this Bureau are practically the same as last year with the exception of an increase of \$250,000 under "Steam machinery" and \$250,000 for the preservation of machinery tools in navy-yards and stations and the handling and preservation of all machinery stores and running the yard engines. This increase is due to the fact that the Navy is larger and more ships are in commission. Also \$65,000 is recommended for the care of the machinery of the vessels loaned to the Naval Militia of the various States.



## NAVAL ACADEMY, CIVIL ESTABLISHMENT.

The following tables gives a comparative statement of the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Naval Academy.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Pay of professors and others.....	\$133,408.26	\$142,462.76	\$134,608.26
Pay of watchmen, mechanics, and others.....	100,000.00	125,000.00	125,000.00
Pay of steam employees.....	20,343.06	20,343.06	20,343.06
Special course athletics.....	3,000.00	5,000.00	5,000.00
Repairs.....	30,000.00	30,000.00	30,000.00
Heating and lighting.....	50,000.00	60,000.00	60,000.00
Contingent.....	103,977.04	100,777.04	100,777.04
Total.....	440,728.36	483,582.86	475,728.36

It will be seen from the above table that the appropriations are practically the same as last year. An increase of \$25,000 under "Pay of watchmen, mechanics, and others" is recommended first, for increased labor in the power house, and second, increased labor to the care of buildings. This increase is due to the number of laborers and not to the increase of pay for same.

## MARINE CORPS.

The Marine Corps is a military branch of the naval service and consists to-day of 278 officers and 8,771 men, and is fully recruited.

The following table shows the appropriations for 1908, estimates for 1909, and the amounts carried in this bill:

Marine Corps.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Pay, officers active list.....	\$598,140.00	\$609,713.00	\$609,713.00
Pay, officers retired list.....	115,000.00	115,000.00	115,000.00
Pay, enlisted men active list.....	1,883,555.20	1,954,084.00	1,935,000.00
Pay, enlisted men retired list.....	67,422.00	84,469.00	84,469.00
Undrawn clothing.....	85,569.98	98,707.80	98,707.80
Mileage.....	40,000.00	45,000.00	45,000.00
Hire and commutation of quarters.....	20,000.00	30,000.00	30,000.00
Civil force.....	30,311.28	35,711.28	30,311.28
Total "Pay, Marine Corps".....	2,843,998.46	2,972,685.08	2,948,201.08
Quartermaster's department:			
Provisions.....	548,503.00	648,543.00	648,543.00
Clothing.....	600,092.00	650,920.00	650,920.00
Fuel.....	80,000.00	110,000.00	100,000.00
Military stores.....	225,782.00	250,782.00	230,000.00
Transportation and recruiting.....	186,000.00	236,000.00	236,000.00
Repairs of barracks.....	78,836.00	88,836.00	88,836.00
Forage.....	17,700.00	17,700.00	17,700.00
Hire or commutation of quarters.....	51,548.00	60,000.00	60,000.00
Contingent.....	280,800.00	330,800.00	285,000.00
Total quartermaster's department.....	2,070,989.00	2,814,971.00	2,316,999.00
Total Marine Corps, exclusive of public works..	4,914,987.46	5,787,656.08	5,265,200.08

The small increases under "Pay, Marine Corps," is because a greater proportion of officers are serving abroad, and a great proportion of officers became entitled to longevity pay during the past year. The increase of \$13,000 in "Undrawn clothing," is due to the expected discharge of 3,000 men upon the expiration of their enlistment, and they are entitled to be paid the money value of the clothing they have saved.

The increase of \$100,000 in the appropriation "Provisions, Marine Corps," is due to the increased cost of 16 per cent in the cost of rations. An increase of \$50,000 is recommended under "Clothing, Marine Corps," because of the fact that about 1,000 men are serving in Cuba, in the field, at such work as is particularly destructive to their uniforms. An increase of \$20,000 under "Fuel, Marine Corps," is necessitated by the increase due to the Army act which increased the number of rooms to which officers are entitled, and, therefore, the amount of fuel that they consume. The increase in "Transportation and recruiting, Marine Corps," is due to the fact that the cost of transportation of the military has increased considerably, as the Department is unable to make competitive contracts with the railroads. The increase under "Repairs of barracks," is due to the repairs to the barracks on the Isthmus of Panama being paid from this appropriation, where the Isthmian Canal Commission has formerly paid for same. The other appropriations for the Marine Corps remain practically the same as last year.

## INCREASE OF THE NAVY.

The following table shows the amounts appropriated for 1908, estimates for 1909, and the amounts carried in this bill:

Increase of the Navy.	Appropriated, 1908.	Estimates, 1909.	Recom- mended.
Bureaus of Construction and Repair and Steam Engineering:			
Increase of the Navy, construction and machinery.	\$12,713,915.00	\$9,832,962.00	\$9,832,962.00
Increase of the Navy, armor and armament .....	10,000,000.00	7,000,000.00	7,000,000.00
Increase of the Navy, equipment .....	750,000.00	400,000.00	400,000.00
Increase of the Navy, subsurface or submarine boats .....	500,000.00	.....	1,445,000.00
Total .....	23,963,915.00	17,232,962.00	18,677,962.00

The following table shows the degree of completion of our ships now under construction:

Vessels building for the increase of the Navy are listed in the following tables, which include all those authorized by law, with the exception of one gunboat, for the Great Lakes, authorized in 1898, and submarine boats appropriated for by the last Congress.

*Vessels building under contract.*

Name.	By whom building.	Estimate of—		Contract time.	Expiration of contract time.
		Degree of completion July 1, 1907.	Probable date of completion.		
BATTLE SHIPS.		<i>Per cent.</i>		<i>Months.</i>	
Mississippi.....	Wm. Cramp & Sons .....	88.96	Dec. 7, 1907	38	Mar. 25, 1907
Idaho.....	do .....	81.98	Feb. 10, 1908	40	May 25, 1907
New Hampshire.....	New York Shipbuilding Co ..	75.40	Aug. 10, 1908	38	Feb. 27, 1908
Michigan.....	do .....	19.40	Mar. 8, 1910	40	Nov. 20, 1909
South Carolina.....	Wm. Cramp & Sons .....	17.48	Feb. 5, 1910	41	Dec. 21, 1909
Delaware.....	Newport News Shipbuilding Co.		Aug. 6, 1910	36	Aug. 6, 1910
North Dakota .....	Fore River Shipbuilding Co..		June 21, 1910	34½	June 21, 1910

*Vessels building under contract—Continued.*

Name.	By whom building.	Estimate of—		Contract time.	Expiration of contract time.
		Degree of completion July 1, 1907.	Probable date of completion.		
ARMORED CRUISERS.		<i>Per cent.</i>		<i>Months.</i>	
California .....	Union Iron Works.....	99.90	<sup>a</sup> May 18, 1907	36	Jan. 10, 1904
South Dakota .....	do .....	97.50	<sup>a</sup> Oct. 2, 1907	36	Do.
North Carolina .....	Newport News Shipbuilding Co.	83.77	Mar. 12, 1908	36	Jan. 3, 1908
Montana .....	do .....	76.96	May 27, 1908	36	Do.
SCOUT CRUISERS.					
Chester .....	Bath Iron Works .....	81.26	July 10, 1908	36	May 4, 1908
Birmingham .....	Fore River Shipbuilding Co..	81.60	Mar. 12, 1908	30	Nov. 17, 1907
Salem .....	do .....	80.80	June 23, 1908	34	Mar. 17, 1908
TORPEDO-BOAT DESTROYERS.					
No. 17 .....	Wm. Cramp & Sons .....		Oct. 10, 1909	24	Oct. 10, 1909
No. 18 .....	do .....		do .....	24	Do.
No. 19 .....	New York Shipbuilding Co ..		Sept. 28, 1909	24	Sept. 28, 1909
No. 20 .....	Bath Iron Works .....		do .....	24	Do.
No. 21 .....	do .....		do .....	24	Do.
SUBMARINE TORPEDO BOATS.					
Octopus .....	Fore River Shipbuilding Co..	97.00	Nov. 3, 1907	18	Sept. 6, 1906
Viper .....	do .....	95.00	<sup>a</sup> Oct. 16, 1907	18	Do.
Cuttlefish .....	do .....	97.00	do. <sup>a</sup> .....	18	Sept. 18, 1906
Tarantula .....	do .....	95.00	Nov. 3, 1907	18	Do.

<sup>a</sup> Delivered to Government.*Vessels building at navy-yards.*

Name.	Where building.	Estimate of—		Con- struc- tional period.	Expiration of construc- tional period.
		Degree of com- pletion, July 1, 1907.	Probable date of com- pletion.		
COLLIERS.		<i>Per cent.</i>		<i>Months.</i>	
Vestal .....	Navy-yard, New York, N. Y. .	30.70	Aug. 1, 1908	.....	.....
Prometheus .....	Navy-yard, Mare Island, Cal.	.70	.....	.....	.....
SEAGOING TUGS.					
Patapsco .....	Navy-yard, Portsmouth, N. H. .	16.00	Jan. 1, 1908	.....	.....
Patuxent .....	Navy-yard, Norfolk, Va. ....	9.00	Sept. 30, 1908	.....	.....

The amount necessary to be appropriated to pay for the work now progressing and contracted during the next fiscal year is \$17,232,962.



## PREVIOUS NAVAL PROGRAMMES.

*List, by years and sessions of Congress, of naval vessels authorized by acts of Congress from 1883 to 1907, inclusive.*

1883 (47TH, 2D)—Page 7.

Name.	Type.	Displacement.	Speed.	Mean draft.	Contract price of hull and machinery.
		<i>Tons.</i>	<i>Knots.</i>	<i>Ft. In.</i>	
Atlanta.....	Protected cruiser.....	3,009	15.30	16 19	\$617,000
Boston.....	do.....	3,035	15.30	17 0	619,000
Chicago.....	do.....	5,000	18 3	20 4	889,000
Dolphin.....	Dispatch boat.....	1,486	15.50	14 3	315,000
Total.....		12,521			2,440,000

1885 (48TH, 2D)—Page 33.

Charleston (destroyed).....	Protected cruiser.....	3,370	18.2	18 7	\$1,017,500
Newark.....	do.....	4,098	19	18 9	1,248,000
Petrel.....	Gunboat.....	892	11.79	11 7	247,000
Yorktown.....	do.....	1,710	16.14	14 0	455,000
Total.....		10,070			2,967,500

1886 (49TH, 1ST)—Page 45.

Amphitrite.....	Monitor.....	3,990	10.5	14 6	.....
Baltimore.....	Protected cruiser.....	4,413	20.096	20 0	\$1,325,000
Cushing.....	Torpedo boat.....	105	22.5	4 10	159,400
Maine (destroyed) <sup>a</sup> .....	Second-class battle ship..... <sup>X</sup>	6,682	17.45	21 6	2,500,000
Monadnock.....	Monitor.....	4,005	12	14 7	.....
Puritan.....	do.....	6,060	12.4	18 0	.....
Terror.....	do.....	3,990	10.5	14 6	.....
Texas <sup>a</sup> .....	Second-class battle ship..... <sup>X</sup>	6,315	17.8	22 6	<sup>b</sup> 2,500,000
Vesuvius.....	Dynamite-gun cruiser.....	929	21.42	10 7	350,000
Total.....		36,489			6,834,400

1887 (49TH, 2D)—Page 62.

Bennington.....	Gunboat.....	1,710	17.5	14 0	\$490,000
Concord.....	do.....	1,710	16.8	14 0	490,000
Miantonomoh.....	Monitor.....	3,990	10.5	14 6	.....
Monterey.....	do.....	4,084	13.6	14 10	1,628,950
Philadelphia.....	Protected cruiser.....	4,410	19.678	19 6	1,350,000
San Francisco.....	do.....	4,098	19.525	18 9	1,428,000
Total.....		20,002			5,886,950

1888 (50TH, 1ST)—Page 81.

Baneroft.....	Gunboat.....	839	14.37	12 2	\$250,000
Cincinnati <sup>a</sup> .....	Protected cruiser.....	3,213	19	18 0	<sup>b</sup> 1,100,000
Detroit.....	Unprotected cruiser.....	2,089	18.71	14 7	612,500
Marblehead.....	do.....	2,089	18.44	14 7	674,000
Montgomery.....	do.....	2,089	19.05	14 7	674,000
New York.....	Armored cruiser.....	8,200	21	23 3	2,985,000
Olympia.....	Protected cruiser.....	5,870	21.686	21 6	1,796,000
Raleigh <sup>a</sup> .....	do.....	3,213	19	18 0	<sup>b</sup> 1,100,000
Total.....		27,602			9,191,500

<sup>a</sup> Built in Government yard.

<sup>b</sup> Maximum cost.

*List, by years and sessions of Congress, of naval vessels authorized by acts of Congress from 1883 to 1907, inclusive—Continued.*

1889 (50TH, 2D)—Page 99.

Name.	Type.	Displacement.	Speed.	Mean draft.	Contract price of hull and machinery.
		<i>Tons.</i>	<i>Knots.</i>	<i>Ft. in.</i>	
Castine.....	Gunboat.....	1,177	16.032	12 0	\$318,500
Katahdin.....	Ram.....	2,155	16.11	15 0	930,000
Machias.....	Gunboat.....	1,177	15.46	12 0	318,500
Total.....		4,509			1,567,000

1890 (51ST, 1ST)—Page 119.

Columbia.....	Protected cruiser.....	7,375	22.8	22 6	\$2,725,000
Ericsson.....	Torpedo boat.....	120	24	4 9	113,500
Indiana.....	First-class battle ship.....	10,288	15.547	24 0	3,063,000
Massachusetts.....	do.....	10,288	16.21	24 0	3,063,000
Oregon.....	do.....	10,288	16.79	24 0	3,222,810
Total.....		38,359			12,187,310

1891 (51ST, 2D)—Page 138.

Minneapolis.....	Protected cruiser.....	7,375	23.073	22 6	\$2,690,000
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1892 (52D, 1ST)—Page 157.

Brooklyn.....	Armored cruiser.....	9,215	21.91	24 0	\$2,986,000
Iowa.....	First-class battle ship.....	11,340	17.09	24 0	3,010,000
Total.....		20,555			5,996,000

1893 (52D, 2D)—Page 176.

Helena.....	Gunboat.....	1,597	15.50	9 0	\$280,000
Nashville.....	do.....	1,371	16.30	11 0	180,000
Plunger*.....	Submarine torpedo boat.....				150,000
Wilmington.....	Gunboat.....	1,397	15.08	9 0	280,000
Total.....		4,165			890,000

1894 (53D, 2D)—Page 196.

Foote.....	Torpedo boat.....	142	24.534	5 0	\$97,500
Rodgers.....	do.....	142	24.49	5 0	97,500
Winslow.....	do.....	142	24.82	5 0	97,500
Total.....		426			292,500

1895 (53D, 53D)—Page 214.

Annapolis.....	Gunboat.....	1,060	13.17	12 5	\$227,700
Dupont.....	Torpedo boat.....	165	28.58	4 8	144,000
Kearsarge.....	First-class battle ship.....	11,540	16.816	23 6	2,250,000
Kentucky.....	do.....	11,540	16.897	23 6	2,250,000
Marietta.....	Gunboat.....	1,000	13.02	12 0	223,000
Newport.....	do.....	1,000	12.29	12 0	229,400
Porter.....	Torpedo boat.....	165	28.630	4 8	144,000
Princeton.....	Gunboat.....	1,100		12 9½	230,000
Rowan.....	Torpedo boat.....	182	27.074	5 11½	160,000
Vicksburg.....	Gunboat.....	1,000	12.71	12 0	229,400
Wheeling.....	do.....	1,000	12.88	12 0	219,000
Total.....		29,752			6,306,500

\*See history submarine boat legislation.

List, by years and sessions of Congress, of naval vessels authorized by acts of Congress from 1883 to 1907, inclusive—Continued.

1906 (54TH, 1ST)—Page 237.

Name.	Type.	Displacement.	Speed.	Mean draft.	Contract price of hull and machinery.
		<i>Tons.</i>	<i>Knots.</i>	<i>Ft. in.</i>	
Alabama	First-class battle ship	11,565	17.103	23 6	\$2,650,000
Craven	Torpedo boat	146.4	30.5	4 7 $\frac{1}{2}$	184,000
Dahlgren	Torpedo boat	146.4	30.5	4 7 $\frac{1}{2}$	194,000
Davis	Torpedo boat	154	23.41	5 10	81,546
Farragut	Torpedo boat	279	30.13	6 0	227,500
Fox	Torpedo boat	154	23.13	5 10	81,546
Gwyn	Torpedo boat	45.78	20.88	3 3	39,000
Illinois	First-class battle ship	11,565	17.449	23 6	2,595,000
McKee	Torpedo boat	65	19.82	4 3	48,500
Mackenzie	do	104.75	21.11	4 3	85,000
Morris	do	46.5	21.15	4 3 $\frac{1}{2}$	39,000
Talbot	do	11,653	17.174	23 8 $\frac{1}{10}$	2,674,950
Wisconsin	First-class battle ship				
Total		35,989.83			8,955,042

1897 (55TH, 1ST)—Page 258.

Bailey	Torpedo boat	280	30.198	6 10	\$210,000
Chesapeake	Training ship	1,175		16 6	112,600
Goldsbrough	Torpedo boat	247.5	30	5 0	214,500
Stringham	do	340	30	6 6	236,000
Total		2,042.5			773,100

1898 (55TH, 2D)—Page 281.

Arkansas	Monitor	3,235	11.50	12 6	\$960,000
Bagley	Torpedo boat	175	29.2	4 11 $\frac{1}{2}$	161,000
Bainbridge	Torpedo-boat destroyer	420	29	6 6	283,000
Barney	Torpedo boat	175	29.1	4 11 $\frac{1}{2}$	161,000
Barry	Torpedo-boat destroyer	420	29	6 6	283,000
Biddle	Torpedo boat	175	28	4 11 $\frac{1}{2}$	161,000
Blakely	do	200	26	5 10 $\frac{1}{2}$	559,400
Chauncey	Torpedo-boat destroyer	420	29	6 6	283,000
Dale	do	420	28	6 6	260,000
Decatur	do	420	28	6 6	260,000
DeLong	Torpedo boat	200	26	5 10 $\frac{1}{2}$	159,400
Florida	Monitor	3,235	11.50	12 6	925,000
Gunboat No. 16	Gunboat	537			260,000
Hopkins	Torpedo-boat destroyer	408	29	6 0	291,000
Hull	do	408	29	6 0	291,000
Lawrence	do	402	30	6 6 $\frac{1}{2}$	281,000
Macdonough	do	402	30	6 6 $\frac{1}{2}$	281,000
Maine	First-class battle ship	12,300	18	23 6	2,885,000
Missouri	do	12,440	18	23 6	2,885,000
Nevada	Monitor	3,228	11.50	12 6	962,000
Nicholson	Torpedo boat	174	26	4 6	165,000
O'Brien	do	174	26	4 6	165,000
Ohio	First-class battle ship	12,440	18	23 6	2,899,000
Paul Jones	Torpedo-boat destroyer	420	29	6 6	285,000
Perry	do	420	29	6 6	285,000
Preble	do	420	29	6 6	285,000
Shubrick	Torpedo boat	200	25	5 2	129,750
Stewart	Torpedo-boat destroyer	420	29	6 6	282,000
Stockton	Torpedo boat	200	24.75	5 2	129,750
Thornton	do	200	26	5 2	129,750
Tingey	do	165	26	4 8	68,000
Truxtun	Torpedo-boat destroyer	433	30	6 0	286,000
Whipple	do	433	30	6 0	286,000
Wilkes	Torpedo boat	165	26.50	4 8	146,000
Worden	Torpedo-boat destroyer	433	30	6 0	286,000
Wyoming	Monitor	3,218	11.50	12 6	975,000
Total		59,335			19,494,056



List, by years and sessions of Congress, of naval vessels authorized by acts of Congress from 1883 to 1907, inclusive—Continued.

1899 (55TH, 3D)—Page 305.

Name.	Type.	Displacement.	Speed.	Mean draft.	Contract price of hull and machinery.
		<i>Tons.</i>	<i>Knots.</i>	<i>Ft. in.</i>	
California .....	Armored cruiser .....	13,680	22	24 1	\$3,800,000
Chattanooga .....	Protected cruiser .....	3,200	16.5	15 9	1,039,966
Cleveland .....	do .....	3,200	16.5	15 9 <sup>5</sup> / <sub>8</sub>	1,041,650
Denver .....	do .....	3,200	16.5	15 9	1,080,000
Des Moines .....	do .....	3,200	16.5	15 9	1,065,000
Galveston .....	do .....	3,200	16.5	15 9	1,027,000
Georgia .....	First-class battle ship .....	14,948	19	29 9	3,590,000
Nebraska .....	do .....	14,948	19	23 9	3,733,600
Pennsylvania .....	Armored cruiser .....	13,680	22	24 1	3,890,000
Tacoma .....	Protected cruiser .....	3,200	16.5	15 9	1,041,900
Virginia .....	First-class battle ship .....	14,948	19	23 9	3,590,000
West Virginia .....	Armored cruiser .....	13,630	22	24 1	3,885,000
Total .....		105,034			28,784,116

1900 (56TH, 1ST)—Page 332.

Adder* .....	Submarine torpedo boat .....				\$170,000
Charleston .....	Protected cruiser .....	9,700	22	22 6	2,740,000
Colorado .....	Armored cruiser .....	13,680	22	24 1	3,780,000
Grampus* .....	Submarine torpedo boat .....				170,000
Holland* .....	do .....				a 150,000
Maryland .....	Armored cruiser .....	13,680	22	24 1	3,775,000
Milwaukee .....	Protected cruiser .....	9,700	22	22 6	2,825,000
Moccasin* .....	Submarine torpedo boat .....				170,000
New Jersey .....	First-class battle ship .....	14,948	19	23 9	3,405,000
Pike* .....	Submarine torpedo boat .....				170,000
Porpoise* .....	do .....				170,000
Rhode Island .....	First-class battle ship .....	14,948	19	23 9	3,405,000
St. Louis .....	Protected cruiser .....	9,700	22	22 6	2,740,000
Shark* .....	Submarine torpedo boat .....				170,000
South Dakota .....	Armored cruiser .....	13,680	22	24 1	3,750,000
Total .....		100,036			27,590,000

1902 (57TH, 1ST)—Page 396.

Connecticut <sup>b</sup> .....	First-class battle ship .....	16,000	18	24 6	c \$4,212,000
Dubuque .....	Gunboat .....	1,050	12.50	12 3	295,000
Louisiana .....	First-class battle ship .....	16,000	18	23 9	3,990,000
Paducah .....	Gunboat .....	1,100	12	12 9 <sup>1</sup> / <sub>2</sub>	355,000
Tennessee .....	Armored cruiser .....	14,500	22	25 0	4,035,000
Washington .....	do .....	14,500	22	25 0	4,035,000
Total .....		63,150			16,922,000

1903 (57TH, 2D)—Page 427.

Cumberland <sup>b</sup> .....	Training ship .....	1,800		16 5 <sup>1</sup> / <sub>2</sub>	c \$370,000
Idaho .....	First-class battle ship .....	13,000	17	24 8	2,999,500
Intrepid .....	Training ship .....	1,800		13 5 <sup>1</sup> / <sub>2</sub>	c 370,000
Kansas .....	First-class battle ship .....	16,000	18	24 6	4,165,000
Minnesota .....	do .....	16,000	18	24 6	4,110,000
Mississippi .....	do .....	13,000	17	24 8	2,999,500
Vermont .....	do .....	16,000	18	24 6	4,179,000
Total .....		77,600			19,193,000

\* See history submarine boat legislation.  
a Purchase price.

b Built in Government yard.  
c Maximum cost.

*List, by years and sessions of Congress, of naval vessels authorized by acts of Congress from 1883 to 1907, inclusive—Continued.*

1904 (58TH, 2D)—Page 458.

Name.	Type.	Displacement.	Speed.	Mean draft.	Contract price of hull and machinery.
		<i>Tons.</i>	<i>Knots.</i>	<i>Ft. in.</i>	
New Hampshire.....	First-class battle ship .....	16,000	18	24 6	\$3,748,000
North Carolina.....	Armored cruiser.....	14,500	22	25 0	a 4,400,000
Montana.....	do.....	14,500	22	25 0	a 4,400,000
Chester.....	Scout cruiser.....	3,750	24	.....	a 1,900,000
Birmingham.....	do.....	3,750	24	.....	a 1,900,000
Salem.....	do.....	3,750	24	.....	a 1,800,000
Vestal.....	Fleet collier.....	.....	.....	.....	a 1,250,000
Prometheus.....	do.....	.....	.....	.....	a 1,250,000
Total.....	.....	56,250	.....	.....	20,648,000

1905 (58TH, 3D)—Page 488.

South Carolina.....	First-class battle ship .....	16,000	18.5	24 6	\$3,540,000
Michigan.....	do.....	16,000	18.5	24 6	3,585,000
Total.....	.....	32,000	.....	.....	7,125,000

1906 (59TH, 1ST)—Page 523.

Delaware.....	First-class battle ship.....	20,000	21	26 11	\$3,987,000
No. 17.....	Torpedo-boat destroyer.....	700	28	8	b 585,000
No. 18.....	do.....	700	28	8	b 585,000
No. 19.....	do.....	700	28	8	b 645,000
	Submarine or subsurface torpedo boats (not exceeding c \$1,000,000; \$500,000 appropriated).	.....	.....	.....	500,000
Total.....	.....	22,100	.....	.....	6,302,000

1907 (59TH, 2D)—Page 557.

North Dakota.....	First-class battle ship .....	20,000.00	21	26 11	\$1,377,000
No. 20.....	Torpedo-boat destroyer.....	700.00	28	8	624,000
No. 21.....	do.....	700.00	28	8	624,000
	Limit of contract for submarine and subsurface torpedo boats, act June 29, 1906, increased to \$3,000,000; \$500,000 appropriated.	.....	.....	.....	500,000
Total.....	.....	21,400.00	.....	.....	6,125,000
Grand total.....	.....	754,762.33	.....	.....	.....

a Maximum cost.

b Limit of cost increased from \$750,000 to \$800,000, act Mar. 2, 1907.

c Limit of cost increased to \$3,000,000, act Mar. 2, 1907.

#### NAVAL PROGRAMME.

The committee recommend this year the following:

That, for the purpose of further increasing the naval establishment of the United States, the President is hereby authorized to have constructed, by contract or in navy-yards, as hereinafter provided, two first-class battle ships, to cost, exclusive of armor and armament, not exceeding six million dollars each, similar in all essential characteristics to the battle ship authorized by the act making appropriations for the naval service for the fiscal year ending June thirtieth, nineteen hundred and eight; ten torpedo-boat destroyers, to have the highest practicable speed, and to cost, exclusive of armament, not to exceed eight hundred thousand dollars each.

The committee further recommend the following provision:

That the Secretary of the Navy is hereby authorized and directed to contract for eight submarine torpedo boats, in an amount not exceeding in the aggregate three million five hundred thousand dollars, and the sum of one million dollars is hereby appropriated toward said purpose, and to remain available until expended: *Provided*, That all such boats shall be of the same type heretofore determined to be superior as the result of the competitive tests held under the provisions of the naval appropriation acts approved June twenty-ninth, nineteen hundred and six, and March second, nineteen hundred and seven, unless on or before October first, nineteen hundred and eight, a submarine torpedo boat of a different type and of full size for naval warfare shall have been constructed and submitted to the Navy Department for like trial, and by such like trial by said Department demonstrated to be not inferior to the best submarine torpedo boat in the competition above referred to.

The committee further recommend the following provision:

That the Secretary of the Navy is hereby authorized, in his discretion, to contract for or purchase one destroyer or torpedo boat of the type known as subsurface, semisubmerged (or the like), the essential feature of which is to have during its operation some portion of the hull or superstructure always on or above the surface, such vessel to cost not to exceed four hundred thousand dollars and to have a speed of not less than twenty-two knots; also two small vessels of like type, having a speed of not less than sixteen knots, and to cost not to exceed twenty-two thousand five hundred dollars each: *Provided*, That before any vessel of the type provided for in this paragraph shall be purchased or contracted for a vessel of such type shall have been constructed complete and of full size for naval warfare and submitted to the Navy Department for such trial and tests as the Secretary of the Navy may in his discretion prescribe, and as the result of such tests be demonstrated to have fulfilled all the reasonable requirement of naval warfare for a vessel of its class; and for these vessels the sum of four hundred and forty-five thousand dollars is hereby appropriated, to be available until expended.

#### FOREIGN NAVAL PROGRAMMES.

NAVY DEPARTMENT,  
*Washington, February 4, 1908.*

SIR: I have the honor to submit herewith information compiled at your request by the Office of Naval Intelligence concerning building programmes of the principal naval powers.

Very respectfully,

TRUMAN H. NEWBERRY,  
*Acting Secretary.*

HON. GEORGE EDMUND FOSS,  
*Chairman of Committee on Naval Affairs,  
House of Representatives.*

OFFICE OF NAVAL INTELLIGENCE,  
*February 1, 1908.*

#### NAVAL BUILDING PROGRAMMES.

The building programmes of the principal foreign powers for the year 1907 are described in the Annual Report of the Secretary of the Navy for the fiscal year 1907, page 3, et seq.

#### FOREIGN SHIPBUILDING PROGRAMMES.

In foreign shipbuilding programmes of the current year the characteristic feature of all is the presence of battle ships of heavy displacement, destroyers, and submarines, and, with the German excepted, the omission of armored cruisers. The speed and displacement of battle ships are increasing in all countries, and there is a marked



tendency toward a reduction in the number of calibers of guns composing the armament. The armament of the latest type of battle ships is composed of heavy turret guns and of smaller guns intended for defense or against torpedo craft. The latter, moreover, are increasing in caliber to such a degree that in some ships of recent design they are of the same calibers that were used but a few years ago for the intermediate battery.

The absence of armored cruisers from the new programmes is worthy of note and may be ascribed to the tendency toward the merging of the battle ship and armored cruiser types. With the increase in size and power of the armored cruiser the distinction between that type and the battle ship has become less and less clearly marked, until in the English *Invincible* class it has almost disappeared. Having reached a limit in armored-cruiser construction in the *Invincible* class, England is about to return to a smaller type of cruisers for commerce protection and police duties, and it has been announced in Parliament that "the further construction of large armored cruisers is not, in the judgment of the Admiralty, immediately required. Attention will, however, be directed in the immediate future to the development of the 'scout' class and to the evolution of a new type of cruiser to take the place of the obsolescent *Edgar* class." [It should be noted, however, that England already possesses a large number (32) of armored cruisers.] The development of the scout is also a subject that is engaging the attention of other foreign admiralities. Torpedo boats of less than 200 tons no longer find place in recent programmes. Several nations are building torpedo boats of 200 to 300 tons, and nearly all are building destroyers, the displacements of which vary from 400 to 800 or 900 tons, and show a steady tendency to increase.

Submarines, also, are increasing in size as well as in numbers, the largest being 577 tons, now building in France. Germany and Austria have recently been added to the list of nations engaged in building submarines. The number and types of vessels building in the several countries are indicated below:

#### ENGLAND.

The programme for 1907 includes 3 large armored vessels of the *Dreadnought* type, 1 fast unarmored cruiser (3,300 tons), 5 ocean-going destroyers (800 tons), 12 first-class torpedo boats (250 tons), and 12 submarines.

The new vessels of the *Dreadnought* type, Nos. 5, 6, and 7, of which one has been named *St. Vincent*, are to be known as the "*St. Vincent*" class. Their armament is stated to be similar to that of the *Dreadnought*, but the displacement has been increased to 19,300 tons. The fast unarmored cruiser scout, known as the *Boadicea*, is to have a speed of 25 knots. The total sum of money to be expended for ship-building during the coming fiscal year is \$39,418,650.

#### FRANCE.

In view of the large number of vessels building under former programmes, which include 6 battle ships of the *Danton* class just laid down, 4 battle ships of the *Justice* class near completion, 4 large armored cruisers, and a large number of destroyers and submarines, the programme for 1907 provides for the beginning of 5 destroyers and 10 submarines. The sum authorized for new construction is \$18,696,346.

#### GERMANY.

According to the "fleet law," which authorizes a continuous building policy and specifies the building programme for each year up to and including 1917, there was authorized this year 2 battle ships, 1 armored cruiser, 2 protected (small) cruisers (scouts), 12 torpedo-boat destroyers, and \$714,000 to be expended for submarines.

The amount to be expended for new construction is \$30,575,860. The characteristics of the battle ships are not announced, but it is believed that they are to be of more than 18,000 tons displacement and are to carry a very large number of heavy-caliber guns. The armored cruiser is believed to be of about 19,000 tons displacement, to carry a number of heavy-caliber guns, and to have turbine engines. The small cruisers are to serve as scouts and possess high speed.

#### JAPAN.

The naval budget, as passed by the Diet and approved by the Emperor, carries appropriations amounting to \$17,965,793 for the construction and repairs of ships.

This includes the cost of repairs to ships in commission as well as the restoration of the Russian prizes and the building of new ships. About \$12,500,000 of the whole amount will be devoted to increasing the navy, the restoration of Russian prizes, and new construction.

The numbers and types of ships to be laid down are not yet officially announced. It is generally understood, however, that according to the programme Japan will, in the near future, lay down two battle ships of the most powerful type and displacement and several torpedo-boat destroyers and submarines. Two submarines are now building for Japan in England. A third battle ship is also included in the Japanese shipbuilding scheme, and it has been recently reported that a large battle ship has been contracted for in Great Britain for the Japanese Government, but this report appears not to be made with authority if true.

#### RUSSIA.

No definite programme has been announced. The minister has been authorized to include in his budget of 1908 an annual appropriation of \$15,000,000 for construction and armament of war ships in excess of the unexpended balance from 1906. Two battle ships of the largest types have been begun in St. Petersburg.

#### ITALY.

The naval budget for 1907-8 includes a provision for the beginning of one battle ship of 16,000 tons, a considerable increase in displacement over recent Italian battle ships.

#### AUSTRIA.

The programme for 1907 provides 3 battle ships of 14,500 tons, a very marked increase over previous Austrian displacements. It also includes a provision for 6 submarines, which are under construction or contracted for.

#### BRAZIL.

The Brazilian programme, which has been under consideration for some years and finally adopted, includes 3 battle ships, about 19,000 tons each; 2 scout cruisers; 18 torpedo boats and destroyers; 3 submarines; 1 mining vessel.

The cost of these is to be spread over a period of years. Of the above, 3 battle ships, 2 scout cruisers, and 10 destroyers are actually under construction or contracted for in British yards.

A tabular statement indicating the number of vessels building or already authorized under the shipbuilding programmes of different nations follows:

*Foreign vessels building or authorized.*

	Battle ships.	Armored cruisers.	Cruisers or scouts.	Destroyers.	Torpedo boats.	Submarines.
England.....	7	6	1	13	24	21
France.....	8	4	0	40	14	63
Germany.....	6	2	5	12	0	2
Japan.....	4	2	3	3	0	2
Russia.....	6	3	0	4	0	6
Italy.....	4	4	1	4	11	3
Austria.....	3	0	1	8	13	6
Brazil.....	3	0	2	10	0	3

The tonnage, sea strength, and personnel of the various naval powers to November 1, 1907, is given in the following tables:

U.S. ~~Navy department~~



U.S. - Navy



War-ship tonnage of the principal naval powers, number and displacement of war ships, built and building, of 1,000 or more tons, and of torpedo craft of more than 50 tons—November 1, 1907.

TYPE OF VESSEL.	GREAT BRITAIN.				FRANCE.				UNITED STATES.				GERMANY.				JAPAN.				RUSSIA.				ITALY.				AUSTRIA.			
	Built.		Building.		Built.		Building.		Built.		Building.		Built.		Building.		Built.		Building.		Built.		Building.		Built.		Building.		Built.		Building.	
	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.	Num-ber.	Tons.
Battle ships, first class <i>a</i> .....	52	749,090	4	72,300	<i>b</i> 19	228,641	8	139,820	22	292,146	7	114,000	22	260,250	6	98,400	11	152,548	2	38,950	5	62,600	4	58,600	10	130,629	3	37,275	3	31,800	.....	.....
Const-defense vessels <i>c</i> .....	.....	.....	.....	.....	12	73,300	.....	.....	11	45,334	.....	.....	8	33,200	.....	.....	3	18,786	.....	.....	4	21,380	.....	.....	.....	.....	6	41,700	.....	.....	.....	.....
Armored cruisers.....	32	372,800	6	95,550	19	166,580	4	54,394	10	128,445	2	29,000	8	79,600	2	34,200	11	108,900	2	29,200	4	46,200	3	24,000	6	39,200	1	39,320	3	18,800	.....	.....
Cruisers above 6,000 tons <i>d</i> .....	19	183,950	.....	.....	3	24,409	.....	.....	5	43,800	.....	.....	1	6,300	.....	.....	2	13,130	.....	.....	7	46,460	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cruisers 6,000 to 3,000 tons <i>d</i> .....	45	200,280	1	3,300	13	52,549	.....	.....	17	61,370	3	11,250	18	74,160	3	11,050	10	38,994	1	4,100	1	3,100	.....	.....	1	3,530	.....	.....	2	8,000	.....	.....
Cruisers 3,000 to 1,000 tons <i>d</i> .....	26	56,305	.....	.....	12	23,152	.....	.....	19	26,317	.....	.....	19	40,685	.....	.....	7	15,288	2	2,600	7	8,800	.....	.....	10	21,920	.....	.....	3	7,050	.....	.....
Torpedo-boat destroyers.....	142	53,235	8	7,556	35	10,594	25	9,001	16	6,957	5	3,750	60	26,298	12	7,560	54	19,413	3	1,143	93	33,834	4	2,420	13	4,133	4	1,460	1	1,600	2	800
Torpedo boats.....	47	7,490	24	6,436	257	24,322	14	1,358	32	5,615	.....	.....	48	8,539	.....	.....	77	6,842	.....	.....	57	6,834	.....	.....	66	7,801	11	2,305	36	4,285	3	600
Submarines.....	39	9,966	9	3,352	41	5,532	58	22,460	12	1,632	7	2,142	1	180	2	360	7	800	2	626	25	3,735	6	2,077	3	407	3	450	.....	.....	6	1,600
Total tons built and total tons building.....	1,633,116		188,494		.....	609,079	.....	227,033	.....	611,616	.....	160,142	.....	529,032	.....	151,570	.....	374,701	.....	76,619	.....	232,943	.....	87,097	.....	207,623	.....	80,810	.....	113,235	.....	3,000
Total tons built and building.....	1,821,610				836,112				771,758				680,602				451,320				320,040				288,433				116,235			

Relative order of war-ship tonnage.

AT PRESENT.		AS WOULD BE THE CASE WERE VESSELS BUILDING NOW COMPLETED.	
Nation.	Tonnage.	Nation.	Tonnage.
Great Britain.....	1,633,116	Great Britain.....	1,821,610
United States.....	611,616	France.....	836,112
France.....	609,079	United States.....	771,758
Germany.....	529,032	Germany.....	680,602
Japan.....	374,701	Japan.....	451,320
Russia.....	232,943	Russia.....	320,040
Italy.....	207,623	Italy.....	288,433
Austria.....	113,235	Austria.....	116,235

- <sup>a</sup> Battle ships, first class, are those of (about) 10,000 or more tons displacement.
- <sup>b</sup> Omitting the *Idna*.
- <sup>c</sup> Includes smaller battle ships and monitors.
- <sup>d</sup> All unarmored war ships of more than 1,000 tons are in this table classed according to displacement as cruisers. Scouts are considered as cruisers in which battery and protection have been sacrificed to secure extreme speed. The word "protected" has been omitted because all cruisers except the smallest and oldest now have protective decks.
- N. B.—The following vessels are not included in the tables:  
Those over 20 years old, unless they have been reconstructed and rearmed since 1900.  
Those not actually begun, although authorized.  
Transports, colliers, repair ships, torpedo depot ships, converted merchant vessels, or yachts.  
Vessels of less than 1,000 tons, except torpedo craft.  
Torpedo craft of less than 50 tons.



## SEA STRENGTH.

## SHIPS.

TABLE I.—*Vessels built November 1, 1907.*

	Battle ships. <i>a</i>	Armored cruisers.	Cruisers. <i>b</i>	De-stroyers.	Torpedo boats.	Sub-marines.	Coast-defense vessels. <i>c</i>
England.....	52	32	90	142	47	39	0
France.....	19	19	28	35	257	41	12
United States.....	22	10	41	16	32	12	11
Germany.....	22	8	38	60	48	1	8
Japan.....	11	11	19	54	77	7	3
Russia.....	5	4	15	93	57	25	4
Italy.....	10	6	11	13	66	3	0
Austria.....	3	3	5	4	36	0	6

*a* Battle ships, first class, are those of (about) 10,000 tons or more displacement.

*b* Includes all unarmored cruising vessels above 1,000 tons displacement.

*c* Includes smaller battle ships and monitors. No more vessels of this class are being proposed or built by the great powers.

TABLE II.—*Vessels building or to be built, November 1, 1907.*

	Battle ships.	Armored cruisers.	Cruisers.	De-stroyers.	Torpedo boats.	Sub-marines.
England.....	<i>a</i> 7	6	1	13	24	21
France.....	8	4	0	40	14	63
United States.....	<i>b</i> 7	2	3	5	0	7
Germany.....	<i>c</i> 6	2	5	12	0	2
Japan.....	4	2	3	3	0	2
Russia.....	6	3	0	4	0	6
Italy.....	4	4	1	4	11	3
Austria.....	3	0	1	8	13	6

*a* England has no continuing shipbuilding policy, but usually lays down each year about four armored ships, with a proportional number of smaller vessels.

*b* Two of these, the *Mississippi* and *Idaho*, are very nearly completed.

Germany has a continuing shipbuilding policy, authorized by the Reichstag, and extending to the year 1917. This authorization provides for the building between 1907 and 1917 of 16 battle ships, 12 armored cruisers, 22 smaller cruisers, and 132 torpedo vessels.

NOTE.—The following vessels are not included in the tables:

Those over 20 years old unless they have been reconstructed and rearmored since 1900.

Transports, colliers, repair ships, converted merchant vessels, and any other auxiliaries.

Vessels of less than 1,000 tons, except torpedo craft. Torpedo craft of less than 50 tons.

In making comparisons of naval strength, and particularly of naval increase, the fact should be taken into consideration that the rapidity of construction varies materially in different countries.

In England, Germany, and Japan battle ships and armored cruisers are completed in two to three years; in the United States from three to four years; and in France, Italy, and Russia not less than four years are required.

Table II includes vessels authorized but not yet laid down, as well as those actually under construction.

TABLE III.—*Personnel.*

Rank.	England.	France.	Germany.	Japan.	United States.
Flag officers.....	96	45	34	55	<i>a</i> 18
Captains and commanders.....	618	360	299	245	<i>a</i> 182
Other line officers and engineers <i>b</i> .....	3,289	1,874	1,732	1,571	751
Medical officers.....	521	409	234	306	282
Pay officers.....	537	187	189	263	210
Warrant officers.....	<i>c</i> 2,007	1,484	2,033	1,064	638
Enlisted men.....	98,973	51,926	<i>d</i> 42,400	41,070	34,062
Marine officers.....	490	.....	86	.....	277
Enlisted men (marines).....	17,526	.....	1,230	.....	8,147

*a* The United States now has, in addition, temporary extra numbers, due to promotion, 4 flag officers, 13 captains, and 14 commanders.

*b* Does not include midshipmen.

*c* Includes chief gunners, chief boatswains, chief signal boatswains, chief carpenters, chief artificer engineers, chief schoolmasters.

*d* Includes 1,230 men of the naval infantry. The German naval infantry forms an expeditionary corps. Its duty in war is to defend, and in peace to garrison, the home fortified ports. One battalion forms the garrison of Kiauchau, China.

## PROGRAMMES FOR 1908-9.

The programmes for 1908, as far as they have been determined or published, are as follows:

## ENGLAND.

The programme for 1908 has not yet been published. Unofficial statements indicate that it will probably include the following:

- Two battle ships (*Dreadnought* type).
- Four medium-sized armored cruisers (improved *Edgar* type, foreshadowed last year).
- One large ocean-going destroyer ("special" or *Swift* type).
- Some ocean-going destroyers ("tribal" type).
- Two battle ships (improved *Dreadnought* type).
- One armored cruiser (*Inflexible* type).
- Two medium-sized armored (or protected) cruisers (improved *Edgar* type, as foreshadowed last year).
- Six unprotected cruisers (or scouts, *Boadicea* type).
- Twelve ocean-going destroyers.
- A number of torpedo boats and submarines.

## FRANCE.

The programme for 1908 is now being discussed in Parliament. The construction of six battle ships of 21,000 tons displacement and 20 knots speed is proposed, and appears to meet with general approval. Tentative designs for these ships are now being discussed.

## GERMANY.

The programme of shipbuilding for the German navy is at present governed by the fleet law of 1900, amended in 1906.

This law establishes the total number of ships of each class which the navy is to contain when the authorized building programme shall have been carried out, and fixes the period within which each class of vessel shall be replaced, as follows:

	Authorized strength.	Age limit (years).
Battle ships.....	38	25
Large (armored) cruisers.....	20	20
Small (protected) cruisers.....	38	20
Torpedo craft.....	144	12

A shipbuilding programme was accordingly established which contemplated the attainment of the authorized strength by the year 1920, as well as the building of substitutes for such existing ships as should reach the age limit during the period covered by the programme; the ships to be laid down were distributed over the years 1906-1917.

It is now proposed to amend this by reducing the age limit of battle ships from 25 to 20 years. This proposal has been approved by the federal council.

The reduction in the life of battle ships will necessitate the replacement of 3 more battle ships between 1908 and 1917 than is contemplated by the present system, i. e., a total of 16 ships. This brings about a rearrangement of the building programme, as shown by the following table.

It is to be noted, however (as shown in the table), that 16 ships having been provided for between 1908 and 1916, an additional ship is set down for 1917.

*Number of substitute battle ships to be laid down.*

Year.	Present law.	Proposed law.	Year.	Present law.	Proposed law.
1908 .....	2	3	1914 .....	1	1
1909 .....	2	3	1915 .....	1	1
1910 .....	1	3	1916 .....	1	1
1911 .....	1	2	1917 .....	2	1
1912 .....	1	1			
1913 .....	1	1	Total .....	13	17

The immediate effect of the change is apparent from a glance at the table. During the four years beginning 1908 there will be laid down 11 battle ships instead of 6. Add to these the 2 ships of the 1907 programme, and it is seen that by 1914 (allowing three years to build a battle ship) Germany will possess 13 battle ships of upward of 19,000 tons displacement each.

The entire programme, as amended by the proposed law, would be as follows:

Year.	Battle ships.	Armored cruisers.	Protected cruisers.	Torpedo craft.
1907 .....	2 substitute .....	1 additional .....	2 substitute .....	6 additional, 6 substitute.
1908 .....	3 substitute .....	do .....	do .....	Do.
1909 .....	do .....	do .....	do .....	Do.
1910 .....	3 substitute, 1 additional.	do .....	do .....	Do.
1911 .....	2 substitute .....	1 additional, 1 substitute.	do .....	Do.
1912 .....	1 substitute .....	1 substitute .....	do .....	Do.
1913 .....	do .....	do .....	do .....	Do.
1914 .....	do .....	do .....	do .....	12 substitute.
1915 .....	do .....	do .....	do .....	Do.
1916 .....	do .....	do .....	do .....	Do.
1917 .....	do .....	do .....	1 substitute .....	Do.

The estimates for the coming year contemplate a total expenditure of over \$82,000,000, of which one-half is for new ships and armaments. This is a large increase over the current estimates, as shown below:

	For ship construction and armament.	Total.
Current estimates (1908) (required to carry out present law) .....	\$32,346,580	\$68,272,680
Proposed amendment (1908) (required to carry out proposed law) .....	41,613,208	82,565,944

This programme is now being considered by the Reichstag.

#### JAPAN.

The programme for 1908 has not been officially announced. Two battle ships of over 19,000 tons displacement are to be laid down in the near future, and the proposed building of two large armored cruisers (of more than 18,000 tons), together with very fast scouts, has been



reported, but not yet substantiated. It is also reported that other battle ships and armored cruisers in addition to those mentioned above are proposed for construction in 1908.

## RUSSIA.

The new programme has not yet been announced. It is reported to include a number of the largest type of battle ships.

## ITALY.

The estimates of the ministry of marine for the fiscal year 1908-9 provide for continuing or completing work on all ships now under construction, including the 16,000-ton battle ship authorized in 1907. It is proposed to build altogether four of the new type battle ship, together with six 28-knot scouts and a further addition to the torpedo flotilla.

## AUSTRIA.

The new programme has not yet been announced.

*Vessels completed during 1907.*

ENGLAND.		Tons.
<i>Hibernia</i> , battle ship.....		16,350
<i>Agamemnon</i> , battle ship.....		16,500
<i>Lord Nelson</i> , battle ship.....		16,500
<i>Achilles</i> , armored cruiser.....		13,550
<i>Cochrane</i> , armored cruiser.....		13,550
<i>Natal</i> , armored cruiser.....		13,550
<i>Warrior</i> , armored cruiser.....		13,550
4 destroyers (tribal class).....		3,165
12 torpedo boats.....		2,700
12 submarines.....		3,768
		113,183
FRANCE.		
<i>Démocratie</i> , battle ship.....		14,860
<i>Justice</i> , battle ship.....		14,860
<i>Liberté</i> , battle ship.....		14,860
<i>Jules Ferry</i> , armored cruiser.....		12,550
<i>Victor Hugo</i> , armored cruiser.....		12,550
6 destroyers.....		2,010
44 torpedo boats.....		4,198
3 submarines.....		1,186
		77,074
GERMANY.		
<i>Pommern</i> , battle ship.....		13,200
<i>Hannover</i> , battle ship.....		13,200
<i>Scharnhorst</i> , armored cruiser.....		11,500
<i>Gneisenau</i> , armored cruiser.....		11,500
<i>Koenigsberg</i> , cruiser.....		3,450
<i>Stuttgart</i> , cruiser.....		3,450
<i>Stettin</i> , cruiser.....		3,450
17 destroyers.....		9,132
		68,882
JAPAN.		
<i>Tsukuba</i> , armored cruiser.....		13,750
<i>Ikoma</i> , armored cruiser.....		13,750
13 destroyers.....		4,875
		32,375

NOTE.—The following vessels, which have been undergoing extensive reconstruction since the close of the Russian war, have been completed and fitted for service during the past year:

	Tons.
<i>Mikasa</i> , battle ship .....	15,200
<i>Iwami</i> (ex <i>Orel</i> ), battle ship .....	13,500
<i>Soya</i> (ex <i>Variag</i> ), cruiser .....	6,500
	<hr/> 35,200
New construction completed during 1907 .....	32,375
Reconstruction completed during 1907 .....	35,200
	<hr/> 67,575

## RUSSIA.

<i>Rurik</i> , armored cruiser .....	15,000
<i>Kagul</i> , cruiser .....	6,675
25 destroyers .....	11,094
5 submarines .....	1,020
	<hr/> 33,789

## ITALY.

<i>Regina Elena</i> , battle ship .....	12,425
4 destroyers .....	1,460
16 torpedo boats .....	3,359
	<hr/> 17,244

## AUSTRIA.

<i>Erzherzog Ferd. Max</i> , battle ship .....	10,600
3 destroyers .....	1,200
13 torpedo boats .....	2,600
	<hr/> 14,400

The following table shows the vessels that have been under construction in the several countries during the past year:

Name.	Type.	Displacement.	Keel laid.	Remarks.
ENGLAND.				
Hibernia .....	B	16,350	January, 1904...	Completed January, 1907.
Agamemnon .....	B	16,500	October, 1904...	Practically completed end 1907.
Lord Nelson .....	B	16,500	November, 1904...	Do.
Bellerophon .....	B	18,600	December, 1906.	
Temeraire .....	B	18,600	January, 1907...	
Superb .....	B	18,600	February, 1907...	
St. Vincent .....	B	19,200	December, 1907.	
Achilles .....	A C	13,550	January, 1904...	Completed March, 1907.
Cochrane .....	A C	13,550	February, 1904...	Completed February, 1907.
Natal .....	A C	13,550	January, 1904...	Completed April, 1907.
Warrior .....	A C	13,550	November, 1904.	Completed June, 1907.
Defence .....	A C	14,600	February, 1905...	
Minotaur .....	A C	14,600	January, 1905...	
Shannon .....	A C	14,600	...do .....	
Invincible .....	A C	17,250	April, 1906 .....	
Inflexible .....	A C	17,250	February, 1906...	
Indomitable .....	A C	17,250	March, 1906 .....	
Boadicea .....	C	3,300	July, 1907 .....	
Cossack .....	d	810	1905 .....	Completed 1907.
Mohawk .....	d	775	1905 .....	Do.
Tartar .....	d	785	1905 .....	Do.
Ghurka .....	d	795	1905 .....	Do.
Afridi .....	d	810	1905 .....	
Swift .....	d	1,800	1905 .....	
Saracen .....	d	893	October, 1906...	
Amazon .....	d	888	...do .....	
Nos. 1-12 .....	t b	215	1905 .....	Do

Name.	Type.	Displacement.	Keel laid.	Remarks.
ENGLAND.				
Nos. 12-24.....	t b	260	1906.....	Completed 1907.
Nos. 25-36.....	t b	.....	1907.....	
A 13.....	sub.	204	.....	
C 3-C 14.....	sub.	314	1905-6.....	
C 15-C 18.....	sub.	314	1906.....	
D 1.....	sub.	(?)	1906.....	
FRANCE.				
Démocratie.....	B	14, 860	May, 1903.....	Completed, 1907.
Justice.....	B	14, 800	May, 1902*.....	Do.
Liberté.....	B	11, 860	.....do.*.....	Do.
Vérité.....	B	14, 860	.....do.*.....	Do.
Danton.....	B	18, 350	1907.....	
Mirabeau.....	B	18, 350	1907.....	
Voltaire.....	B	18, 350	June, 1907.....	
Diderot.....	B	18, 350	December, 1906*.....	
Condorcet.....	B	18, 350	.....do.*.....	
Vergniaud.....	B	18, 350	.....do.*.....	
Jules Ferry.....	A C	12, 550	1901.....	Do.
Victor Hugo.....	A C	12, 550	March, 1903.....	Do.
Jules Michelet.....	A C	12, 750	June, 1904.....	
Ernest Renan.....	A C	13, 644	August, 1903*.....	
Edgar Quinet.....	A C	14, 000	November, 1905.....	
Waldeck Rousseau.....	A C	14, 000	June, 1906.....	
Stylet.....	d	335	March, 1904.....	Do.
Pierrier.....	d	335	October, 1904.....	
Tromblon.....	d	335	July, 1904.....	Do.
Obusier.....	d	335	.....do.....	Do.
Mortier.....	d	335	September, 1904.....	Do.
Carquois.....	d	335	July, 1905.....	
Trident.....	d	335	.....do.....	
Fleuriet.....	d	335	May, 1905.....	Do.
Coutelas.....	d	335	.....do.....	Do.
Glaive.....	d	335	.....do.....	
Poignard.....	d	335	.....do.....	
Cognée.....	d	335	May, 1906.....	
Hache.....	d	335	August, 1906.....	
Massue.....	d	335	November, 1906.....	
Sabretache.....	d	335	November, 1905*.....	
Oriflamme.....	d	335	.....do.*.....	
Etendard.....	d	335	.....do.*.....	
Fanion.....	d	335	.....do.*.....	
Sape.....	d	335	.....do.*.....	
Gabion.....	d	335	.....do.*.....	
Branlebas.....	d	335	.....do.*.....	
Fanfare.....	d	335	.....do.*.....	
Hussard.....	d	355	October, 1906*.....	
Voltigeur.....	d	335	.....do.*.....	
Tirailleur.....	d	335	.....do.*.....	
Chasseur.....	d	335	.....do.*.....	
Spahi.....	d	335	.....do.*.....	
Carabinier.....	d	335	.....do.*.....	
Janissaire.....	d	335	December, 1907*.....	
Mameluk.....	d	335	.....do.*.....	
46 torpedo boats.....		97	1904*.....	44 boats completed, 1907.
Emeraude.....	sub.	390	December, 1904.....	Completed, 1907.
Opale.....	sub.	390	.....do.....	Do.
Rubis.....	sub.	390	.....do.....	Do.
Saphire.....	sub.	390	May, 1905.....	
Topaze.....	sub.	390	March, 1905.....	
Turquoise.....	sub.	390	.....do.....	
Guepe No. 1 and No. 2.....	sub.	45	October, 1904.....	
Omega.....	sub.	301	February, 1904.....	
Circe.....	sub.	351	April, 1905.....	
Calypso.....	sub.	351	.....do.....	
Pluviose.....	sub.	398	August, 1905.....	Do.
Ventôse.....	sub.	398	.....do.....	Do.
Q 53-Q 60.....	sub.	398	.....do.....	
Q 62-63.....	sub.	398	.....do.....	
Q 64-Q 69.....	sub.	398	.....do.....	
Q 70-Q 72.....	Sub.	398	August, 1906*.....	
Q 75-Q 80.....	sub.	398	.....do.*.....	
Q 83-Q 88.....	sub.	398	.....do.*.....	
Q 73.....	sub.	577	.....do.*.....	
Q 74.....	sub.	530	.....do.*.....	
Q 82.....	sub.	535	.....do.*.....	
Q 89.....	sub.	355	.....do.*.....	
Q 90-Q 99.....	sub.	398	August, 1907*.....	

\*Signifies date of contract or of order to dockyard; where there is no \* the date is that of the actual laying of the keel.



Name.	Type.	Displacement.	Keel laid.	Remarks.
GERMANY.				
Pommern.....	B	13,200	April, 1904.....	Completed 1907.
Hannover.....	B	13,200	.....do.....	Do.
Schleswig Holstein.....	B	13,200	July, 1905.....	
Schlesien.....	B	13,200	.....do.....	
Ersatz Bayern.....	B	18,000	May, 1907.....	
Ersatz Sachsen.....	B	18,000	April, 1907.....	
Ersatz Baden.....	B	18,000	July, 1907.....	
Ersatz Württemberg.....	B	18,000	May, 1907.....	
Scharnhorst.....	A C	11,500	June, 1905.....	Do.
Gneisenau.....	A C	11,500	June, 1904.....	Do.
"E".....	A C	15,000	December, 1906.....	
"F".....	A C	19,200	September, 1907.....	
Koenigsberg.....	C	3,450	July, 1904.....	Completed 1907.
Stuttgart.....	C	3,450	1905.....	Do.
Stettin.....	C	3,450	1905.....	Do.
Nürnberg.....	C	3,450	December, 1905.....	
Dresden.....	C	3,800	1906.....	
Ersatz Pfeil.....	C	3,800	1906.....	
Ersatz Greif.....	C	3,800	1907.....	
Ersatz Jagd.....	C	3,800	1907.....	
G 131-G 136.....	d	480	1905.....	Do.
S 138-S 149.....	d	520	1906.....	Do.
V 150-V 161.....	d	(?) 680	1907.....	
Submarines.....		(?)	(?)	(?)
JAPAN.				
Satsuma.....	B	19,150	May, 1905.....	Launched Nov. 15, 1906.
Aki.....	B	19,800	December, 1905.....	Launched Apr. 15, 1907.
Tsukuba.....	A C	13,750	January, 1905.....	Completed January, 1907.
Ikoima.....	A C	13,750	March, 1905.....	Completed December, 1907.
Kurama.....	A C	14,600	September, 1905.....	Launched Oct. 21, 1907.
Ibuki.....	A C	14,600	May, 1907.....	Launched Nov. 22, 1907.
Tone.....	C	4,100	October, 1906.....	Launched Oct. 24, 1907.
Yodo.....	C	1,250	1906.....	Launched Nov. 19, 1907.
Mogami.....	C	1,350	1906.....	Launched Oct. 31, 1907.
Shirayuki.....	d	375	May, 1905.....	Completed 1907.
Hatsuharu.....	d	375	1905.....	Do.
Yudachi.....	d	375	March, 1905.....	Do.
Mikatzuki.....	d	375	June, 1905.....	Do.
Nowake.....	d	375	August, 1905.....	Do.
Shirotoye.....	d	375	July, 1905.....	Do.
Yunagi.....	d	375	1905.....	Do.
Utsuki.....	d	375	1905.....	Do.
Shigure.....	d	375	1905.....	Do.
Minatsuki.....	d	375	1905.....	Do.
Nagatsuki.....	d	375	1905.....	Do.
Matsukaze.....	d	375	1905.....	Do.
Kikutsuki.....	d	375	1905.....	Do.
Uranami.....	d	375	1907.....	
Isonami.....	d	375	1907.....	
Ayanami.....	d	375	1907.....	
2 submarines.....	s	314	1907.....	Building in England.
RUSSIA.				
Evstafi.....	B	12,700	1903.....	
Ivan Zlatoust.....	B	12,700	November, 1903.....	
Imp. Pavai I.....	B	16,600	October, 1903.....	
Andreï Pervosvanni.....	B	16,600	January, 1903.....	
Rurik.....	A C	15,000	1905.....	Completed 1907.
Bayan.....	A C	8,000	1905.....	
Pallada.....	A C	8,000	1905.....	
Adm. Makharoff.....	A C	8,000	1905.....	Building in France.
Kagul.....	C	6,675	March, 1901.....	Completed 1907.
Pamiat Merkuria.....	C	6,675	September, 1901.....	
4 destroyers.....	d	615	1904-5.....	Do.
8 destroyers.....	d	500	1904-5.....	Do.
13 destroyers.....	d	350	1904-5.....	Do.
4 destroyers.....	d	605	1906.....	
2 submarines.....	s	150	1904.....	Do.
3 submarines.....	s	240		Do.
Akula.....	s	360		
Minoga.....	s	117		
4 submarines.....	s	425		
ITALY.				
Regina Elena.....	B	12,425	September, 1901.....	Completed 1907.
Vittorio Emanuele.....	B	12,425	.....do.....	
Napoli.....	B	12,425	October, 1903.....	
Roma.....	B	12,425	September, 1903.....	
Fan Giorgio.....	A C	9,850	July, 1905.....	

Name.	Type.	Displacement.	Keel laid.	Remarks.
ITALY—continued.				
San Marco .....	A C	9,830	July, 1907.....	
Pisa .....	A C	9,830		
Amalfi .....	A C	9,830		
Artigliere .....	d	365	1904.....	Completed 1907.
Bersagliere .....	d	365	1904.....	Do.
Granatiere .....	d	365	1904.....	Do.
Lanciere .....	d	365	1904.....	Do.
16 torpedo boats .....	s	210	1904-5.....	Do.
3 submarines .....	s	150		
AUSTRIA.				
Erzherzog Ferd. Max .....	B	10,600	1903.....	Completed 1907.
Ersatz Tegetthof .....	B	14,500	1907.....	
Ersatz Rudolph .....	B	14,500	1907.....	
Ersatz Zara .....	C	3,500	1907.....	
Ulan .....	d	400		Do.
Streiter .....	d	400		Do.
Wildfang .....	d	400		Do.
Scharfschutze .....	d	450		
Uskose .....	d	400		
6 submarines.....	s		1907.....	

TABLE I.—*Vessels built, February 1, 1908.*

	Battle ships.	Armored cruisers.	Cruisers.	Destroyers.	Torpedo boats.	Submarines.	Coast-defense vessels.
England.....	53	32	90	146	47	42	0
France.....	18	19	26	38	264	42	11
United States.....	23	10	40	16	32	12	11
Germany.....	22	8	38	60	48	1	8
Japan.....	11	11	19	54	74	7	3
Russia.....	5	4	15	93	57	25	4
Italy.....	10	6	11	17	66	3	0
Austria.....	3	3	5	4	39	0	6

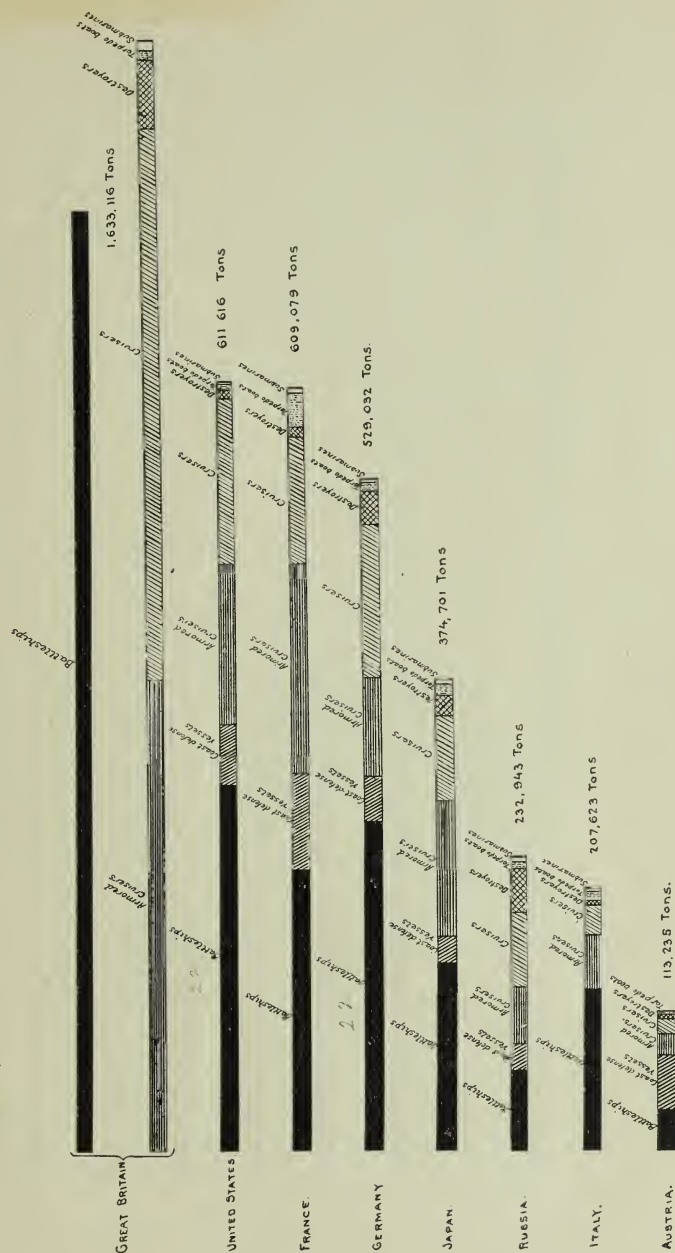
*a* Idaho and New Hampshire not included.TABLE II.—*Vessels building or to be built, February 1, 1908.*

	Battle ships.	Armored cruisers.	Cruisers.	Destroyers.	Torpedo boats.	Submarines.
England.....	6	6	1	9	24	13
France <sup>a</sup> .....	12	4	0	37	2	59
United States.....	6	2	3	5	0	7
Germany <sup>a</sup> .....	9	3	7	24	0	(?) 2
Japan <sup>a</sup> .....	4	2	3	4	0	2
Russia.....	6	3	0	4	0	6
Italy <sup>a</sup> .....	7	4	1	0	11	3
Austria.....	3	0	1	8	10	6

<sup>a</sup> Includes vessels in 1908 programme.

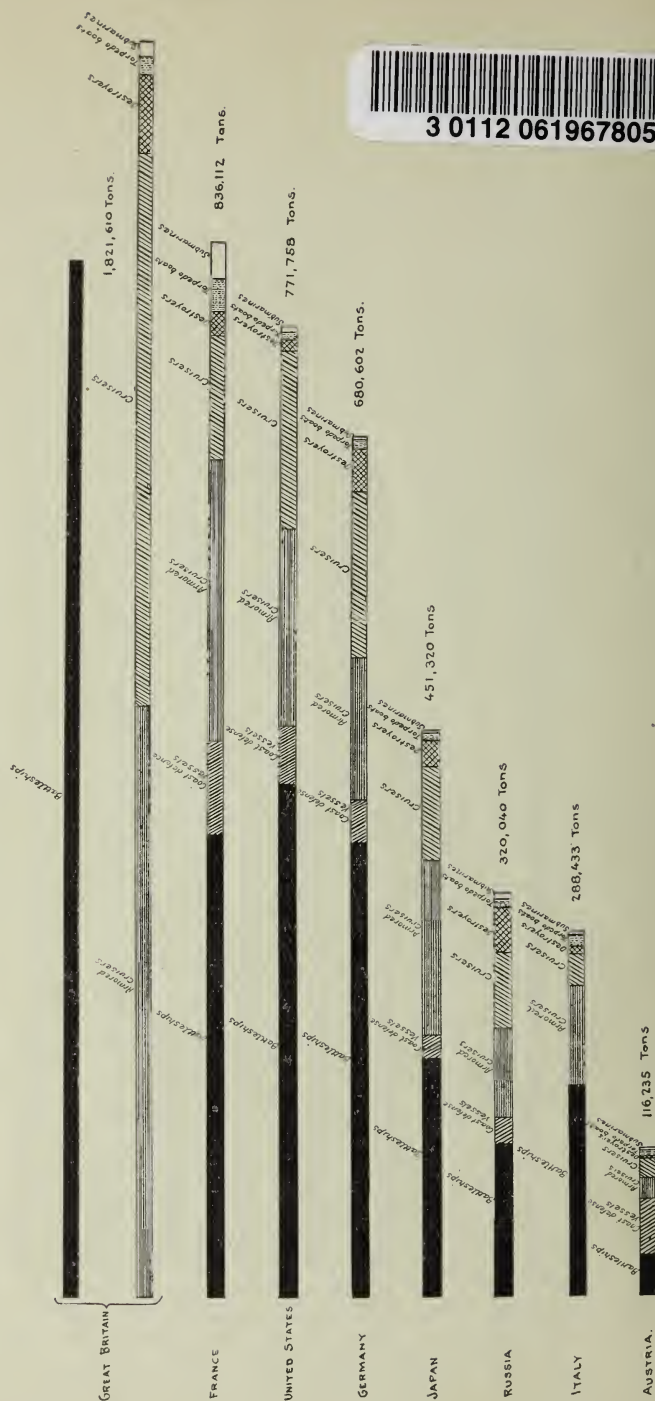
# WAR SHIP TONNAGE OF THE PRINCIPAL NAVAL POWERS. SHIPS BUILT.

November 1, 1907



# WAR SHIP TONNAGE OF THE PRINCIPAL NAVAL POWERS. SHIPS BUILT & BUILDING.

November 1, 1907.



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